

What is claimed is:

1 1. A slot assignment unit for use in a time division multiple access
2 (TDMA) transmitter, comprising:
3 a first table;
4 a second table;
5 a control data generation unit for receiving assignment terms for a
6 plurality of time slots and slot data from an external source, producing a set
7 of assignment control data according to the assignment terms and the slot
8 data and storing the set of assignment control data into an entry of said first
9 table in response to a command signal applied thereto; and
10 a sequence controller for analyzing a plurality of said sets of
11 assignment control data, producing a plurality of address pointers, storing
12 said plurality of address pointers in said second table in such a sequence that
13 the address pointers can be sequentially read out in a desired transmission
14 sequence, and supplying said command signal to said control data
15 generation unit in response to each of said address pointers.

1 2. The slot assignment unit of claim 1, wherein said TDMA
2 transmitter includes a data memory for storing a plurality of transmit data,
3 and wherein said set of assignment control data stored in said first table
4 includes an address of a communication terminal, a starting address point of
5 each transmit data in said data memory, and a count number of slots
6 assigned to said entry.

1 3. A time division multiple access (TDMA) transmitter

2 comprising:

3 a first table;

4 a second table;

5 a control data generation unit for receiving assignment terms for a
6 plurality of time slots and slot data from an external source, producing a set
7 of assignment control data according to the assignment terms and the slot
8 data and storing the set of assignment control data into an entry of said first
9 table in response to a command signal applied thereto; and

10 a sequence controller for analyzing a plurality of said sets of
11 assignment control data, producing a plurality of address pointers, storing
12 said plurality of address pointers in said second table in such a sequence that
13 the address pointers can be sequentially read out from a starting address of
14 the second table, and supplying said command signal to said control data
15 generation unit in response to each of said address pointers;

16 a data memory for storing a plurality of transmit data; and

17 a framing unit for sequentially reading address pointers from said
18 starting address of said second table and reading assignment control data
19 from entries of said first table which are specified by the read address
20 pointers and formulating a frame with the read assignment control data and
21 said plurality of transmit data from said data memory.

1 4. The TDMA transmitter of claim 3, wherein said set of
2 assignment control data stored in said first table includes an address of an
3 assigned communication terminal, a starting address point of each transmit
4 data in said data memory, and a count number of assigned slots.

- 1 ~~5.~~ A slot assignment method for a time division multiple access
2 (TDMA) transmitter, comprising the steps of:
3 a) receiving assignment terms for a plurality of time slots and slot
4 data;
5 b) producing a set of assignment control data according to the
6 assignment terms and the slot data;
7 c) repeating steps (a) and (b) to produce a plurality of sets of
8 assignment control data;
9 d) analyzing said plurality of sets of assignment control data;
10 e) storing one of said sets of assignment control data into an entry
11 of a first table;
12 f) storing an address pointer in a second table corresponding to
13 said entry of said first table; and
14 g) repeating steps (d) to (f) until all of said assignment control data
15 are stored in the first table.

- 1 6. The slot assignment method of claim 5, further comprising the
2 steps of:
3 sequentially reading address pointers from a starting address of said
4 second table and reading said plurality of sets of assignment control data
5 from said first table in accordance with the read address pointers; and
6 formulating a frame with the assignment control data read from the
7 first table.

Added